

### PATENT COOPERATION TREATY

## **PCT**

### INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference	FOR FURTHER ACTION	See Notification of Transmittal of International	
HALOCARBON 2		Preliminary Examination Report (Form	
International application No.	International filing date (day)	month/year) Priority date (day/month/year)	
PCT/US00/ 19863	21 JULY 2000	21 JULY 1999	
International Patent Classification (IPC) Please See Supplemental Sheet.	or national classification and I	PC	
Applicant HALOCARBON PRODUCTS CORPO	DRATION		
<ol> <li>This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</li> <li>This REPORT consists of a total of  sheets.</li> </ol>			
been amended and are th	panied by ANNEXES, i.e., she e basis for this report and or sh on 607 of the Administrative I	ets of the description, claims and/or drawings which have eets containing rectifications made before this Authority.  Instructions under the PCT).	
These annexes consist of a tol	al of sheets.		
3. This report contains indication	s relating to the following it	ems:	
I X Basis of the repor	rt		
II Priority			
	nt of report with regard to no	ovelty, inventive step or industrial applicability	
IV Lack of unity of	_	•	
V X Reasoned statement	•	ard to novelty, inventive step or industrial applicability;	
VI Certain documents of			
· <u></u>	ne international application	•	
	s on the international applicat	ion	
VIII Cartain observation	s on the international approac		
		· · · · · · · · · · · · · · · · · · ·	
Date of submission of the demand	Date	of completion of this report	
21 FEBRUARY 2001	2	8 SEPTEMBER 2001	
Name and mailing address of the IPEA/	US Auth	orized officer	
Commissioner of Patents and Tradem Box PCT		DWARD CAIN Jean Proctor	
Washington, D.C. 20231	[	paralegal Spethalist ohone No. (703) 308-0661	



International application No.

I.	Ba	sis o	f the report		
1	With	геояг	rd to the elements of the international appl	lication:*	
1.	$\mathbf{x}$		nternational application as originall		
	=		description:	•	
	X				, as originally filed
		page	NONE		, filed with the demand
		page	NONE NONE	, filed with the letter of	
	X		claims:		as animinally filed
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	$\mathbf{x}$	the c	drawings:		
					, as originally filed
		page	NONE		
		page	NONE NONE	, filed with the letter of	
		4 la	sequence listing part of the descriptio	n:	
	X	the s	NONE		, as originally filed
		nane	NONE.		, filed with the demand
		page	NONE NONE	, filed with the letter of	
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3.	Wit pre	h rega limina	ard to any nucleotide and/or amino a ary examination was carried out on t	acid sequence disclosed in the international he basis of the sequence listing:	application, the international
		conta	ained in the international application	n in printed form.	
	$\Box$	filed	together with the international app	lication in computer readable form.	
	H		shed subsequently to this Authority		
	H		shed subsequently to this Authority		
		The :	- · · · · · · · · · · · · · · · · · · ·	shed written sequence listing does not go be	yond the disclosure in the
		The :	• •	in computer readable form is identical to the	writen sequence listing has
		The	amendments have resulted in the ca	ancellation of:	
4.			NONE		
		띩	the description, pages		
		띹	the claims, Nos. NONE		
		X	the drawings, sheets/fig NONE		
5.		This	report has been drawn as if (some of) the	he amendments had not been made, since they	have been considered to go
		beyo	and the disclosure as filed, as indicated	in the Supplemental Box (Rule 70.2(c)).**	dur Article 14 are referred to
1	in th	aceme is rep 70.17	port as "originally filed" and are not a	e receiving Office in response to an invitation une nnexed to this report since they do not contai	n amendments (Rules 70.16
,				ents must be referred to under item 1 and ann	nexed to this report.



International application No.

statement			
Novelty (N)	Claims	2-12	YE
- , , ,	Claims	1	NC
Inventive Step (IS)	Claims	2-12	YE
22,	Claims	1	NO
Industrial Applicability (IA)	Claims	1-19	YI
manstrial Application (1A)	Claims	none	NO
claimed process steps for the production	of the specific fluo	-(4), because the prior art does not teach procarbons from the starting materials re	ecited.
NONE			,
NONE			





International application No.

PCT/US00/19863

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Boxes I - VIII

She $\epsilon$ 

CLASSIFICATION:

The International Patent Classification (IPC) and/or the National classification are as listed below:

IPC(7): C07C 17/00, 17/26, 17/30, 19/08, 21/18 and US Cl.: 570/134, 135, 136, 151, 153, 155, 160, 163, 171, 172

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## PATENT COOPERATION TREATY

## **PCT**



(PCT Article 36 and Rule 70)

Applicant's or agent's file reference	FOR FURTHER ACTION	See Notification of Transmittal of International
HALOCARBON 2		Preliminary Examination Report (Form PCT/IPEA/416)
International application No.	International filing date (day)	month/year) Priority date (day/month/year)
PCT/ US00/ 19863	21 JULY 2000	21 JULY 1999
International Patent Classification (IPC) Please See Supplemental Sheet.	) or national classification and II	PC
Applicant HALOCARBON PRODUCT'S CORPO	ORATION	
Examining Authority and is	s transmitted to the applicant	been prepared by this International Preliminary according to Article 36.
		and the state of t
been amended and are th	panied by ANNEXES, i.e., she te basis for this report and/or sh ion 607 of the Administrative I	ets of the description, claims and/or drawings which have eets containing rectifications made before this Authority. Instructions under the PCT).
These annexes consist of a to	tal of sheets.	
3. This report contains indication	ns relating to the following it	ems:
I X Basis of the repo	rt	
II Priority		
	nt of report with regard to no	velty, inventive step or industrial applicability
IV Lack of unity of		versy, inventive stop of incustorial approximation
V X Reasoned statemen citations and explan	nations supporting such statement	rd to novelty, inventive step or industrial applicability; nt
VI Certain documents	cited	
VII Certain defects in the	he international application	
VIII Certain observation	s on the international applicati	on
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	•	•
Date of submission of the demand	Date	of completion of this report
21 FEBRUARY 2001	28	S SEPTEMBER 2001
Name and mailing address of the IPEA		orized officer
Commissioner of Patents and Trader	•	DWARD CAIN Jean Proctor
Washington, D.C. 20231 Facsimile No. (703) 305-3230		hone No. (703) 308-0661
1.400HIHIC 140. (103) 303-3230		(103) 300-0001

International	application	No
Incinational	application	110

I.	Ba	sis o	f the repoi	rt				
1	With	reaur	od to the elem	ents of the interna	tional applicati	on·*		
1.	$\mathbf{x}$	_		l application as				
	=		description:		<u>-</u> ,			
	X		es					as originally filed
		nage	es	NONE				, as originally filed , filed with the demand
			:s	NONE		, filed with the	letter of	-
	$\mathbf{x}$		claims:					
			:s	14-16	<del></del>	* 1 1 /		, as originally filed
			:s					atement) under Article 19
			:s	NONE NONE	filed u	ith the letter of		, filed with the demand
		page	's	NONE	, Illed w	attir the letter or _		
	$\overline{\mathbf{x}}$	the o	drawings:					
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2.	the in These	nternate elements the latest the	ational appliements were a anguage of anguage of anguage of the	cation was filed, univailable or furnish a translation fur publication of t	nless otherwined to this Automished for the internation	se indicated under the thority in the following the purposes of interest application (un	uis item.  ng language  ernational search (un  nder Rule 48.3(b)).	thority in the language in which which is:  nder Rule 23.1(b)).  nination (under Rules 55.2 and/
3.						sequence disclosed asis of the sequence		application, the international
		conta	ined in the	international ap	oplication in	printed form.		
		filed	together w	ith the internation	onal applicat	tion in computer re	eadable form.	
	$\Box$	furni	shed subsec	quently to this A	authority in	written form.		
	Ħ	furni	shed subsec	quently to this A	authority in	computer readable	form.	
		The :	statement th	at the subsequent dication as filed b	tly furnished nas been furr	written sequence li iished.	sting does not go be	yond the disclosure in the
			statement tha furnished.	t the information	recorded in c	omputer readable fo	rm is identical to the	writen sequence listing has
4	$\mathbf{x}$	The	amendmen	ts have resulted	in the cance	ellation of:		
٦,		X	the descri	ption, pages	NONE			
		$\overline{\mathbf{x}}$			NONE			
				s, Nos ngs, sheets <del>/fig</del>	NONE			
e		<u>ث</u>						harm harm our ridered 4 ·
5.						mendments had not t e Supplemental Box		have been considered to go
*	in th	ceme	nt sheets which	ch have been furnis	hed to the rec	eiving Office in respo	nse to an invitation una	ler Anicle 14 are referred to n amendments (Rules 70.16
*				t containing such	amendinents i	nust be referred to	under item 1 and ann	exed to this report.

International application No.

Novelty (N)	Claims	2-12	YE
	Claims	1	NO
Inventive Step (IS)	Claims	g-18 -	YE
Пунция элер (19)	Claims	1	
	Claima	1-12	YI
Industrial Applicability (IA)	Claims Claims	none	NO
	Cialm.		
NEW CITATIONS		rocarbons from the starting materials recited.	

International application No.

PCT/US00/19863

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(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Boxes I - VIII

Sheet 10

#### CLASSIFICATION:

The International Patent Classification (IPC) and/or the National classification are as listed below:
IPC(7): C07C 17/00, 17/26, 17/30, 19/08, 21/18 and US Cl.: 570/134, 135, 136, 151, 153, 155, 160, 163, 171, 172

Form PCT/IFEA/409 (Supplemental Box) (July 1998)\*





### (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



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#### (43) International Publication Date 1 February 2001 (01.02.2001)

#### **PCT**

## (10) International Publication Number WO 01/07384 A1

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(21) International Application Number: PCT/US00/19863

(22) International Filing Date: 21 July 2000 (21.07.2000)

(25) Filing Language:

English

C07C 17/00,

(26) Publication Language:

English

(30) Priority Data:

60/144,739

21 July 1999 (21.07.1999) US

(71) Applicant (for all designated States except US): HALO-CARBON PRODUCTS CORPORATION [US/US]; 887 Kinderkamack Road, River Edge, NJ 07661 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): SPRAGUE, Lee [US/US]; 1316 Buena Vista Road, Augusta, GA 30909 (US). GRAHAM, Daniel [US/US]; 4137 Meriden Avenue, Martinez, GA 30907 (US). FERSTANDIG, Louis [US/US]; 1425 NW 28 Avenue, Delray Beach, FL 33445 (US).

(74) Agent: BRISCOE, Kurt, G.; Norris McLaughlin & Marcus, 660 White Plains Road, Tarrytown, NY 10591-5144 (US).

(81) Designated States (national): AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

#### Published:

With international search report.

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PRODUCTION OF ALIPHATIC FLUOROCARBONS

(57) Abstract: Processes for preparing a variety of fluorocarbons are disclosed. Processes are described wherein the yields of desired products are increased by endlessly converting the undesired products to reactive intermediates. Trifluoroethylene is prepared in greater than 50 % yield by pyrolizing 1-chloro-2,2,2-trifluoroethane at a temperature about 725 °C. 1,1,1,3,3-Pentafluoropropylene is prepared by pyrolyzing 1-chloro-2,2,2-trifluoroethane in the presence of chlorodifluoromethane. Trifluoroethylene is prepared by pyrolyzing 1,2,2,2-tetrafluoroethane. 1-Chloro-2,2-difluoroethylene is prepared by pyrolyzing 1-chloro-2,2,2-trifluoroethane. 1,1-Dichloro-2,2-difluoroethylene is prepared by pyrolyzing 1-chloro-1,2,2,2-tetrafluoroethane and hydrogen chloride. 1,1,1,2,3,4,4,4-Octafluoro-2-butene is prepared by pyrolyzing 1-chloro-1,2,2,2-tetrafluoroethane. 1,1,1,2,3,4,4,4-Octafluoro-2-butene is prepared by pyrolyzing 1,1,2,2,2-pentafluoroethane. 1,2,2,2-Tetrafluoroethane is prepared by pyrolyzing 1,1,2,2,2-tetrafluoroethane. 1,1-Dichloro-1,2,2,2-tetrafluoroethane. 1,1-Dichloro-1,2,2,2-tetrafluoroethane. 1,1-Dichloro-1,2,2,2-tetrafluoroethane.

### PATENT COOPERATION Th\_ATY

### From the INTERNATIONAL BUREAU

### **PCT**

#### **NOTIFICATION OF ELECTION**

(PCT Rule 61.2)-

To:

Commissioner
US Department of Commerce
United States Patent and Trademark
Office, PCT

Office, PC1 2011 South Clark Place Room

CP2/5C24

Arlington, VA 22202

Date of mailing (day/month/year) 17 May 2001 (17.05.01)	ETATS-UNIS D'AMERIQUE in its capacity as elected Office		
International application No. PCT/US00/19863	Applicant's or agent's file reference		
International filing date (day/month/year) 21 July 2000 (21.07.00)	Priority date (day/month/year) 21 July 1999 (21.07.99)		
Applicant			
SPRAGUE, Lee et al			

	<u> </u>
1.	The designated Office is hereby notified of its election made:  X in the demand filed with the International Preliminary Examining Authority on:  21 February 2001 (21.02.01)
	in a notice effecting later election filed with the International Bureau on:
2.	The election X was was not
	made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).
İ	

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Authorized officer

Pascal Piriou

Facsimile No.: (41-22) 740.14.35

Telephone No.: (41-22) 338.83.38

### PATENT COOPERATION The ATY

		From the INTERNATIONAL BUREAU		
PCT	То:	-	-	
(PCT Rule 92bis.1 and 220 Administrative Instructions, Section 422) Nev		BRISCOE, Kurt, G. Norris McLaughlin & Marcus 220 East 42nd Street, 30th Floor New York, NY 10017 ETATS-UNIS D'AMERIQUE		
Applicant's or agent's file reference		IMPORTANT NOT	IFICATION	
International application No. PCT/US00/19863		nal filing date (day/month/y uly 2000 (21.07.00)	ear)	
Name and Address	K the agen	t the comm	on representative State of Residence	
BRISCOE, Kurt, G. Norris McLaughlin & Marcus 660 White Plains Road Tarrytown, NY 10591-5144 United States of America		Telephone No. (914) 332-1700  Facsimile No. (914) 332-1844  Teleprinter No.		
2. The International Bureau hereby notifies the applicant that the person the name X the add		change has been recorded the nationality	concerning: the residence	
Name and Address		State of Nationality	State of Residence	
BRISCOE, Kurt, G. Norris McLaughlin & Marcus 220 East 42nd Street, 30th Floor New York, NY 10017 United States of America		Telephone No. (212) 808-0700 Facsimile No.		
		(212) 808-0844		
		Teleprinter No.		
3. Further observations, if necessary:				
4. A copy of this notification has been sent to:				
X the receiving Office	[	the designated Offices	concerned	
the International Searching Authority  X the International Preliminary Examining Authority		X the elected Offices concerned other:		
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized	officer S. Mafla (Fa	x 338.87.40)	
Facsimile No.: (41-22) 740.14.35	Telephone	No.: (41-22) 338.83.38		



A. CLASSIFICATION OF SUBJECT MATTER  IPC(7) :C07C 17/00, 17/26, 17/30, 19/08, 21/18  US CL : 570/134, 135, 136, 151, 153, 155, 160, 163, 171, 172  According to International Patent Classification (IPC) r to both national classification and IPC					
B. FIELDS SEARCHED					
Minimum documentation searched (classification system followed by classification symbols)  U.S.: 570/134, 135, 136, 151, 153, 155, 160, 163, 171, 172					
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched none					
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) WEST search terms: fluorocarbon, perfluorocarbon, freon, pyrolysis, recycle					
C. DOCUMENTS CONSIDERED TO BE RELEVANT					
Category* Citation of document, with indication, where a	ppropriate, of the relevant passages	Relevant to claim No.			
Y US 4,898,645 A (VOIGHT et al) 06 claims.	February 1990, abstract and	1-12			
Y US RE29,534 A (RESNICK) 07 Febru	US RE29,534 A (RESNICK) 07 February 1978, abstract and claims. 1-12				
Further documents are listed in the continuation of Box (	C. See patent family annex.				
Special categories of cited documents:  A*  document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the inte date and not in config the appl the principle or theory underlying the	ication but cited to understand			
"E" earlier document published on or after the international filing date  "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other	document published on or after the international filing date  *X*  document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone				
*O* document referring to an oral disclosure, use, exhibition or other means	special reason (as specified)  "Y"  document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is document referring to an oral disclosure, use, exhibition or other combined with one or more other such documents, such combination				
*P* document published prior to the international filing date but later than the priority date claimed	*&* document member of the same patent				
Date of the actual completion of the international search 07 SEPTEMBER 2000	Date of mailing of the international second 20 SEP 2000	arch report 👝			
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT	Name and mailing address of the ISA/US  Commissioner of Patents and Trademarks  Authorized officer				
Washington, D.C. 20231 Facsimile No. (703) 305-3230					

IPCCT  1:000: 177.66, 177.30, 19708, 217.80   150, 163, 171, 172     According to International Patent Classification (IPC) or to both national classification and IPC    EFIELDS SEARCHED    Minimum documentation searched (classification system followed by classification symbols)   U.S. : 570/134, 135, 136, 151, 153, 155, 160, 163, 171, 172   Documentation searched other daan minimum documentation to the extent that such documents are included in the fields searched none   Documentation searched other daan minimum documentation to the extent that such documents are included in the fields searched none   WEST search terms: fluorocarbon, perfluorocarbon, freon, pyrolysis, recycle   C. DOCUMENTS CONSIDERED TO BE RELEVANT   Cauegory*   Citation of document, with indication, where appropriate, of the relevant passages   Relevant to claim No.	A. CLASSIFICATION OF SUBJECT MATTER					
According to International Patent Classification (PC) or to both national classification and IPC  B. FIELDS SEARCHED  Minimum documentation scarched (classification system followed by classification symbols)  U.S.: 570/134, 135, 136, 151, 153, 155, 160, 163, 171, 172  Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched none  Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  WEST SEARCHEED  C. DOCUMENTS CONSIDERED TO BE RELEVANT  Category*  Citation of document, with indication, where appropriate, of the relevant passages  Relevant to claim No.  Y. US 4,898,645 A (VOIGHT et al) 06 February 1990, abstract and claims.  Y. US RE29,534 A (RESNICK) 07 February 1978, abstract and claims.  1-12  LUS RE29,534 A (RESNICK) 07 February 1978, abstract and claims.  1-12  Lus document which may those dooks on priority clained or which is one considered to be of granular relevance to the international fling date or priority claims of the search of secondar referring to an oral disciouse, sure, subhistion or other precisit classes (as specifical) search to the international fling date or priority claims (as the search to the international fling date or priority claims (as the search to the international fling date or priority claims (as the search to the international fling date or priority claims (as the search to the international fling date or priority claims (as the search to the international fling date or priority claims (as the search to the international fling date or priority claims (as the search to prio	, ,					
B. FIELDS SEARCHED  Minimum documentation searched (classification system followed by classification symbols)  U.S.: \$70/134, 135, 136, 151, 153, 155, 160, 163, 171, 172  Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched none  Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  WEST search terms: fluorocarbon, perfluorocarbon, freon, pyrolysis, recycle  C. DOCUMENTS CONSIDERED TO BE RELEVANT  Category*  Citation of document, with indication, where appropriate, of the relevant passages  Relevant to claim No.  U.S. 4,898,645 A (VOIGHT et al) 06 February 1990, abstract and claims.  1-12  US RE29,534 A (RESNICK) 07 February 1978, abstract and claims.  1-12  Special estegories of cited documents.  Course of the special restricts of the special restricts of the special restore which may three doubts on picroly chantel to or which is excellent document published on or after the international filing date but laser than special reason (as specified)  Course in referring to an ordinal consultation of the international search  Course in referring to an ordinal consultation of the international search  Course in referring to an ordinal consultation of the international search  Course in referring to an expectification or which is special reason (as specified)  Course in referring to an expectification or which is special reason (as specified)  Course in referring to an expectification or which is special reason (as specified)  Course in referring to an expectification or which is special reason (as specified)  Course in referring to an expectification or which is special reason (as specified)  Course in referring to an expectification or which is special reason (as specified)  Course in referring to an expectification or which is special reason (as specified						
Minimum documentation searched (classification system followed by classification symbols)  U.S.: 570/134, 135, 136, 151, 153, 155, 160, 163, 171, 172  Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched none  Bilectronic data base consulted during the international search (name of data base and, where practicable, search terms used)  WEST  search terms: fluorocarbon, perfluorocarbon, freon, pyrolysis, recycle  C. DOCUMENTS CONSIDERED TO BE RELEVANT  Cauegory*  Citation of document, with indication, where appropriate, of the relevant passages  Relevant to claim No.  Y. US 4,898,645 A (VOIGHT et al) 06 February 1990, abstract and claims.  Y. US RE29,534 A (RESNICK) 07 February 1978, abstract and claims.  1-12  LIS RE29,534 A (RESNICK) 07 February 1978, abstract and claims.  1-12  List document published after the international fling date to be of gravitude relevance, the chined in evidence related to be of gravitude relevance, the chined invention cannot be considered to reach the consideration of particular relevance, the chined invention cannot be considered novel or example to involve an invention and being obvious to a prison skilled in the arms.  The document published prior to the international fling date to tasted the relevance published prior to the international fling date to the comment in the document in which are document as when the cannot be considered novel or example to have been an invention as and decument referring to an oral disclosure, use, exhibition or other priority disc channed.  The document published prior to the international fling date to the cannot referred to the comment in the document in which in the considered to which are priority disc channed.  The document published prior to the international fling date to the cannot be considered to which the document in which the priority disc channed with one or more other considered to work and priority decument in which the oral priority disc channed with one or mor						
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Y US 4,898,645 A (VOIGHT et al) 06 February 1990, abstract and claims.  Y US RE29,534 A (RESNICK) 07 February 1978, abstract and claims.  1-12  See patent family annex.  The special eategories of cited document special eategories of cited document of a particular relevance to be of particular relevance article of the earlier document published on or after the international filing date or priority date chains the publication date of another relation or other document referring to an oral disclosure, use, exhibition or other means?  The document published prior to the international filing date but later than the priority date (blaimed) and the priority date (blaim	C. DOCUMENTS CONSIDERED TO BE RELEVANT					
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